

WHAT IS CLAIMED IS:

1 1. The method of preparing an animal for use as
2 a specimen in ischemic optic nerve disease research
3 comprising the steps of employing photosensitizing agents
4 injected into the body of the specimen, and
5 irradiating the optic nerve with energy from
6 a laser to damage capillaries feeding the anterior portion
7 of the optic nerve.

1 2. The method of preparing an animal according
2 to claim 1 wherein
3 for rats the laser for irradiating the optic
4 nerve has approximately a 500 to 600 micron size spot at 50
5 microwatts.

1 3. The method of preparing an animal according
2 to claim 2 wherein
3 the spot is directed to the optic nerve for
4 approximately 7 to 30 seconds determined primarily by the
5 retinal artery occlusion desired and under standard
6 conditions, preferably 15 seconds.

1 4. The method of preparing an animal according
2 to claim 1 wherein
3 the laser is an argon green laser.

1 5. The method of preparing an animal according
2 to claim 1 wherein
3 the laser is a frequency double YAG laser.

 6. The method of preparing an animal according
1 to claim 1 wherein
2 the laser is an yttrium aluminum garnet
3 negdym material also known as YAG.

1 7. The method of attempting to locate the
2 specific genes involved in ischemic optic nerve disease
3 comprising
4 preparing a specimen animal that has
5 ischemic optic nerve disease and
6 analyzing the specimen to determine the
7 specific genes producing the disease.

1 8. The method of attempting to locate the
2 specific genes according to claim 7 wherein
3 the specimen is produced by injecting
4 specific photosensitive agents into the specimen, and
5 subjecting the optic nerve to laser light.